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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------------|------------------------|
| 10/585,391 | 08/21/2007 | Grenvil Marquis Dunn | 1362-101.US | 2990 |
| 23390 | 7590 | 12/17/2008 | | |
| COLIN P ABRAHAMS 5850 CANOGA AVENUE SUITE 400 WOODLAND HILLS, CA 91367 | | | EXAMINER WOOD, JARED M | |
| | | | ART UNIT 4181 | PAPER NUMBER |
| | | | MAIL DATE 12/17/2008 | DELIVERY MODE PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/585,391 | Applicant(s) DUNN, GRENVIL MARQUIS | |
| | Examiner JARED WOOD | Art Unit 4181 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 34-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 34-38, 40-43, 49 and 52-54 is/are rejected.
- 7) ☒ Claim(s) 39, 44-48, 50, 51 and 55 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities:

1. On page 1, line 2 of paragraph 4, the unit ‘kilojoules per g mole’ is used. The examiner believes the appropriate unit should be ‘kilojoules per mole’.
2. On page 2, line 10 of paragraph 2, a comma should appear between the words ‘holistically’ and ‘the.’
3. On page 3, line 1 of paragraph 4, a comma should appear between the words ‘preferably’ and ‘all.’
4. On page 3, line 3 of paragraph 8, a comma should appear between the words ‘preferably’ and ‘the.’
5. On page 3, line 1 of paragraph 9, a comma should appear between the words ‘preferably’ and ‘the.’
6. On page 4, line 1 of paragraph 3, a comma should appear between the words ‘preferably’ and ‘the.’
7. On page 4, line 1 of paragraph 6, a comma should appear between the words ‘whole’ and ‘of’ and the comma following the word ‘of’ should be removed.
8. On page 5, line 1 of paragraph 3, a comma should appear between the words ‘preferably’ and ‘the.’

Appropriate correction is required.

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Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Clams 34-38, 43, 49, and 52-54 are rejected under 35 U.S.C. 102(b) as being anticipated by US 6,451,088 (Marsden et al.).

As to claims 34 and 52, Marsden teaches an multi-chambered, agitated autoclave pressure leaching process where, in order to control the processing temperatures, the autoclave slurry is flashed in a flash tank (column 8, line 50), **which also reads on 54**. The flashed product is direct to a solid-liquid separation apparatus such as a thickener, filter, or CCD circuit (column 8, line 62), **which also reads on claim 43**, where the leached residue (solids or underflow) is partly or, potentially, fully recycled back to the autoclave (column 8, line 27), **which also reads on claim 49**, or a feed tank upstream of the autoclave (column 8, line 42), **which also reads on claims 36-38 and 53**. The liquid portion of the flash (overflow) is passed to a solvent extraction step, following which, all or a portion of the raffinate is recycled back to the autoclave (column 10, line 19), **which also reads on claim 35**.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,451,088 (Marsden et al.).

The features of **claims 40-42** are related to an optimization of the pressure leaching process in the autoclave and are considered to be obvious. It is well settled that determination of cause effective variables such as these process parameters is within the skill of one practicing in the art. *In re Boesch*, 205 USPQ 215 (CCPA 1980).

Allowable Subject Matter

Claims 39, 44-48, 50-51, and 55 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:
The nearest prior art (US 6,451,088 and WO02/092862) does not contemplate using the returned

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solids to control the leach viscosity and thereby the oxygen mass transfer nor do they contemplate the use of a solid-liquid separation immediately prior to the autoclave.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. WO02/092862 (US 7,374,732).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JARED WOOD whose telephone number is (571)270-5911. The examiner can normally be reached on Monday - Friday, 7:30 am - 5:00 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vickie Kim can be reached on (571)272-0579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MICHAEL MARCHESCHI/

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Primary Examiner, Art Unit 1793

/JARED WOOD/

Examiner, Art Unit 4181